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Patent

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

CHEN, et al.

RECEIVED

Serial No.: 07/863,791

JUN 15 1992

Filed: April 6, 1992

GROUP 150

For: METHOD FOR IMPROVED
LITHOGRAPHIC PATTERNING IN A
SEMICONDUCTOR FABRICATION
PROCESS

Examiner:

Art Unit:

1507

INFORMATION DISCLOSURE STATEMENT

Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Enclosed is a copy of Information Disclosure Statement Form PTO-1449, submitted in compliance with Rule 37 C.F.R. § 1.56, together with a copy of the eleven references.

It is respectfully requested that the cited documents be considered and that the enclosed copy of Information Disclosure Statement Form PTO-1449 be initialled by the Examiner to indicate such consideration and returned to Applicant.

The eleven references are:

(1) Chien, Paul et al.; "Proximity Effects in Submicron Optical Lithography": pgs. 35 - 39, SPIE Vol. 772 Optical Microlithography VI (1987).

(2) Rosenbluth, Alan E. et al.; "A Critical Examination of Submicron Optical Lithography Using Simulated Projection Images": pgs. 1190 -

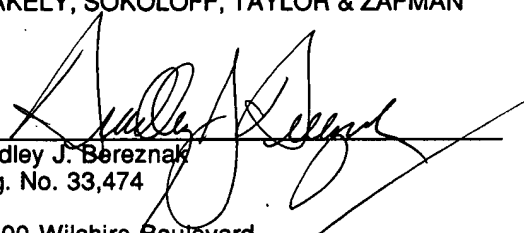
- (3) Nissan-Cohen, Y. et al.; "Variable Proximity Corrections for Submicron Optical Lithographic Masks": pgs. 13 -14, Proc. 1987 Symp. VLSI Tech. (1987).
- (4) Meyerhofer, Dietrich; "Resolution and Proximity Effect in Optical Lithography": pgs. 174 - 187, SPIE Vol. 922 Optical/Laser Microlithography (1988).
- (5) Shamma, Nader et al.; "A Method for Correction of Proximity Effect in Optical Projection Lithography": pgs. 145 - 156, Proc. KTI Interface (1989).
- (6) Liu, Albert C. et al.; "A Study of Projected Optical Images for Typical IC Mask Patterns Illuminated by Partially Coherent Light": pgs. 1251 -1263, IEEE Transactions on Electron Devices, Vol. ED-30, No. 10, October 1983.
- (7) Maxwell, Graeme D. et al.; "An Analysis of the Relevance to Linewidth Control of Various Aerial Image Characteristics": pgs. 213 - 223, SPIE Vol. 633 Optical Microlithography V (1986).
- (8) Ong, Edith et al.; "Comparison of Proximity Effects in Contrast Enhancement Layer and Bi-layer Resist Processes": pgs. 443 - 448, J. Vac Sci. Technol. B 5 (1), Jan/Feb 1987.
- (9) Flanner III, Philip D. et al.; "Two-Dimensional Optical Proximity Effects": pgs. 239 -244, SPIE Vol. 633 Optical Microlithography V (1986).
- (10) Dunbrack, Steve K.; "Masks for Sub - 0.5 micron Optical Lithography": pgs. 2 - 8, SPIE Vol. 922 Optical/Laser Microlithography (1988).
- (11) Wolf, T.M. et al.; "Proximity Effects of Lithography and Etching in Submicron Processes": pgs. 335 - 349, Proc. KTI Interface (1989).

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Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 6/5, 1992


Bradley J. Berezna
Reg. No. 33,474

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA. 90025-1026

(408) 720-8598

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